



**In the United States Patent and Trademark Office**

APPLICANT: BAREFIELD, KEVIN et.al. ) ART UNIT: 1732  
APPLICATION #: 10/730,564 ) EXAMINER: S. STAICOVICI  
FILED: 12/08/2003 )  
FOR: RESIN INFUSION POTTING

**APPEAL BRIEF OF PETITIONERS**

Pursuant to 37 CFR §§ 1.192(a) and 41.37, the Petitioners, Kevin J. Barefield and Richard V. Campbell hereby serve their Appeal Brief.

**I. STATEMENT OF REAL PARTY IN INTEREST**

The Applicants in this matter are Kevin J. Barefield and Richard V. Campbell. Applicants have assigned their rights to this invention to Bright Technologies, LLC. Thus, LLC is the real party in interest.

**II. STATEMENT AS TO RELATED APPEALS AND INTERFERENCES**

To the knowledge of Applicants, there are presently no related appeals or interferences.

**III. STATEMENT AS TO THE STATUS OF THE CLAIMS**

Claims 1-12 and 20-21 of the pending application currently stand rejected. The Petitioners are appealing the decisions to each and every rejected claim. A listing of the status of each and every pending claim is as follows:

1. Canceled.
2. Canceled.

3. Canceled.
4. Canceled.
5. Canceled.
6. Canceled.
7. Canceled.
8. Canceled.
9. Canceled.
10. Canceled.
11. Rejected.
12. Rejected.
13. Canceled.
14. Canceled.
15. Canceled.
16. Canceled.
17. Canceled.
18. Canceled.
19. Canceled.
20. Rejected.
21. Rejected.

The Rejection as to each and every rejected claim is appealed.

#### IV. STATUS OF AMENDMENTS

Applicant has not submitted any amendments subsequent to final rejection.

## V. SUMMARY OF THE CLAIMED SUBJECT MATTER

The invention relates to a method for attaching an anchor to a cable using a form of molding. In order to accomplish the objective of attaching the anchor to the strands, a separate injector is clamped to the open end of the anchor in order to create a seal around the anchor. The creation of the seal allows the liquid potting compound to be injected into the strands under pressure.

In the following section, the Applicants attempt to comply with 37 CFR §41.37(c)(5). There are two independent claim presented in this appeal – Claim 11 and Claim 11. Claims 11 and 20 are stated again below, with annotations to the reference numbers and drawings figures from the original specification.

Claim 11. A method for attaching an anchor having an internal passage and an open end to a region of strands on an end of a cable, comprising:

- a. exposing said region of strands in said cable (such as element (16) in FIG. 1);
- b. placing said region of strands within said internal passage of said anchor (as shown as elements (54) and (18) in FIG. 10);
- c. providing an injector (element (46) in FIG. 10), including
  - i. a sealing surface (anchor facing surface of element (46) in FIG. 10);
  - ii. a needle (element (48) in FIG. 11), extending from said sealing surface, having a first end proximate said sealing surface and a second end distal to said sealing surface;
  - iii. an injection orifice proximate said second end of said needle (element (50) in FIG. 10);

- d. clamping said injector against said open end of said anchor so that said needle protrudes into said region of strands and said sealing surface seals said open end of said anchor (shown in FIG. 11);
- e. providing a potting compound which transitions from a liquid state to a solid state over time;
- f. injecting said potting compound, in said liquid state, under pressure into said strand cavity through said injection orifice, so that said liquid potting compound infuses throughout said region of strands (described in specification page 8, lines 17-19);
- g. withdrawing said needle while said potting compound is still in said liquid state (described in specification page 8, lines 19-20); and
- h. allowing said liquid potting compound to harden into a solid, thereby locking said region of strands within said anchor (described in specification page 8, line 20).

Claim 20. A method for attaching an anchor having an internal passage and an open end to a region of strands on an end of a cable, comprising:

- a. exposing said region of strands in said cable (such as element (16) in FIG. 1);
- b. placing said region of strands within said internal passage of said anchor (as shown as elements (54) and (18) in FIG. 10);
- c. providing an injector (element (46) in FIG. 10 and 9B), including
  - i. a sealing surface (anchor facing surface of element (46) in FIG. 10);
  - ii. an injection orifice in said sealing surface (element (50) in FIG. 9B);
- d. clamping said injector against said open end of said anchor so that said injection orifice is directed toward said region of strands and said sealing surface seals said

- open end of said anchor (shown in FIG. 11);
- e. providing a potting compound which transitions from a liquid state to a solid state over time;
  - f. injecting said potting compound, in said liquid state, under pressure into said strand cavity through said injection orifice, so that said liquid potting compound infuses throughout said region of strands (described in specification page 8, lines 17-19); and
  - g. allowing said liquid potting compound to harden into said solid state, thereby locking said region of strands within said anchor (described in specification page 8, line 20).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED UPON APPEAL

1. Whether claims 11-12 and 20-21 are obvious over Killian (U.S. Patent No. 4,184,784) in view of Zimmerman et al (U.S. Patent No. 5,372,767) to McAfee and further in view of Brown (U.S. Patent No. 3,859,780) and Davis (U.S. Patent No. 3,660,887) and are therefore unpatentable under 35 U.S.C. § 103(a).

#### VII. ARGUMENT

A. A prima facie case of obviousness has not been established with respect to Claims 11-12, because the references do not teach all of the limitations of the claims.

A prior art reference does not create a case of prima facie obviousness if it fails to disclose a material element or limitation claimed in the present invention. *In re Evanega*, 829 F.2d 1110 (Fed. Cir. 1987). None of the references disclose the step of “**clamping said injector**

***against said open end of said anchor*** so that said needle protrudes into said region of strands and ***said sealing surface seals said open end of said anchor.***”

Instead, the Examiner argued that Zimmerman teaches a molding process where the injector forms a sealing surface with the mold and “it would have been obvious to use the anchor itself as a mold as taught by Davis.” Applicant notes that none of the references disclose the step of clamping the anchor and injector together such that the sealing surface of the injector seals the open end of the anchor. This seal is important. Without such a seal, the pressurized injection of the potting compound would cause the potting compound to splatter out of the anchor and the anchor cavity would not be completely filled.

It is axiomatic that the prior art to be considered under section 103 must be analyzed in the absence of any teaching from the claimed invention. Such an evaluation requires the often difficult task of excluding anything taught or suggested by the present invention from one’s mind. *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861 (Fed.Cir.1985).

In the abstract, this proposition is straightforward. However, courts have often struggled in applying it to relatively simple inventions. This is true because a relatively simple invention - once revealed by its creator - is easily understood. Thereafter, one is prone “to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.” *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed.Cir. 983).

The United States Court of Appeals for the Federal Circuit recently discussed this issue in the case of *In Re Dembiczak*, 175 F.3d 994 (Fed.Cir. 2000), *limited on other grounds by In Re Gartside*, 203 F.3d 1305 (Fed.Cir.2000). *Dembiczak* involved a patent claim on the now-familiar orange trash bags with the printed Jack-O-Lantern faces.

The Dembiczak patent application was rejected by the U.S.P.T.O., then rejected by the Board of Patent Appeals and Interferences. In reversing these decisions, the Federal Circuit noted that “[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *Id.* at 999.

The evidence of a suggestion, teaching, or motivation to combine prior art references must be established in order to set forth a prima facie case of obviousness. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 297 (Fed.Cir.1985). This evidence must come from the prior art references themselves, the knowledge of one who is skilled in the art, or from the suggestions inherent in the nature of a problem to be solved. *ProMold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed.Cir.1996). The suggestion of combination usually comes from the teachings within the references themselves. *In Re Rouffet*, 149 F.3d 1350, 1359 (Fed.Cir.1998).

Petitioners respectfully submit that the requirements for a prima facie case of obviousness have not been established in this case. Instead, Petitioners suggest that the P.T.O. has fallen into the trap the *Dembiczak* opinion warns so sternly against - that of using the inventor's own disclosure to suggest combinations in order to defeat patentability.

Petitioners further note that a suggested modification to a reference which destroys the intent, purpose, or function of the invention disclosed in the reference does not establish a case of prima facie obviousness. This is true because, in such a case, there would be no motivation to modify the prior art reference in the fashion proposed by the Examiner. *In re Gordon*, 733 F.2d 900 (Fed.Cir. 1984).

Significant modification would need to be performed to Davis's anchor in order for such

an anchor to be clamped against an injector in such a way that the open end of the anchor could be sealed (an element recited in Petitioners' claim). Davis utilizes two connectors which extend outward from the surface of the anchor to allow the anchor to be attached to a pin or yoke and ball assembly (see connectors with alignment holes (19) in FIG. 1). These connectors would prevent Davis's anchor from forming a seal with the injector or working in Petitioners claimed process. Because these features would need to be removed from Davis's anchor, the modification would destroy the intent, purpose, and function of these features and render Davis's anchor unsuitable for the purposes of his invention.

In addition, Petitioners submit that the combination – even if the unsupported modification of Davis was included – would still not teach all of the claimed features of Petitioners' invention. If Zimmerman's process was altered to enable an anchor to be used as a mold, Zimmerman would no longer be able to support both the needle (reference numeral 4) and the injection orifice (14) since these two elements are on separate clamping portions. One side of the clamping structure would need to be removed (presumably the needle side, since there is no other way to introduce resin into the mold in Zimmerman's process) so that the anchor could be clamped against the injector. Such a combination would lack Petitioners' claimed "needle."

B. A prima facie case of obviousness has not been established with respect to Claims 20-21, because the references do not teach all of the limitations of the claims.

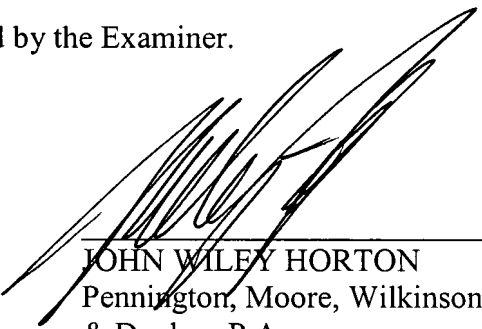
None of the references disclose the step "***clamping said injector against said open end of said anchor*** so that said injection orifice is directed toward said region of strands ***and said sealing surface seals said open end of said anchor.***"

As set forth above, the step of clamping an injector against an anchor is not taught in any



of the prior art references and the combination would destroy the functionality of Davis's invention. As such, there is no evidence to believe that one that is skilled in the art would develop Petitioners invention in natural course absent the teachings of the Petitioners specification.

WHEREFORE, the Petitioners hereby request that the Board of Patent Appeals and Interferences reverse the rejections previously entered by the Examiner.



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**APPENDIX CONTAINING A COPY OF THE APPEALED CLAIMS**

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. A method for attaching an anchor having an internal passage and an open end to a region of strands on an end of a cable, comprising:
  - a. exposing said region of strands in said cable;
  - b. placing said region of strands within said internal passage of said anchor;
  - c. providing an injector, including
    - i. a sealing surface;
    - ii. a needle, extending from said sealing surface, having a first end proximate said sealing surface and a second end distal to said sealing surface;
    - iii. an injection orifice proximate said second end of said needle;
  - d. clamping said injector against said open end of said anchor so that said needle protrudes into said region of strands and said sealing surface seals said open end of said anchor;

- e. providing a potting compound which transitions from a liquid state to a solid state over time;
  - f. injecting said potting compound, in said liquid state, under pressure into said strand cavity through said injection orifice, so that said liquid potting compound infuses throughout said region of strands;
  - g. withdrawing said needle while said potting compound is still in said liquid state; and
  - h. allowing said liquid potting compound to harden into a solid, thereby locking said region of strands within said anchor.
12. A method as recited in claim 11, further comprising the additional step of providing said injector with a vent.
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)
17. (Cancelled)
18. (Cancelled)
19. (Cancelled)
20. A method for attaching an anchor having an internal passage and an open end to a region of strands on an end of a cable, comprising:

- a. exposing said region of strands in said cable;
  - b. placing said region of strands within said internal passage of said anchor;
  - c. providing an injector, including
    - i. a sealing surface;
    - ii. an injection orifice in said sealing surface;
  - d. clamping said injector against said open end of said anchor so that said injection orifice is directed toward said region of strands and said sealing surface seals said open end of said anchor;
  - e. providing a potting compound which transitions from a liquid state to a solid state over time;
  - f. injecting said potting compound, in said liquid state, under pressure into said strand cavity through said injection orifice, so that said liquid potting compound infuses throughout said region of strands; and
  - g. allowing said liquid potting compound to harden into said solid state, thereby locking said region of strands within said anchor.
21. A method as recited in claim 20, further comprising the additional step of providing said injector with a vent.
22. (Cancelled)

**EVIDENCE APPENDIX**

No evidence has been submitted pursuant to 37 CFR §§ 1.130, 1.131, or 1.132.

**RELATED PROCEEDING APPENDIX**

To the Applicant's knowledge, there are no related proceedings.